## **Annual Drinking Water Quality Report**

## **Borough of Stanhope Water Department**

For the Year 2018, Results from the Year 2017

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is wells. Our four wells draw their water from the Delaware Water Basin. Our wells range from 83 to 220 feet deep. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at <a href="https://www.state.nj.us/dep/swap">www.state.nj.us/dep/swap</a> or by contacting NJDEP - Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system's Source Water Assessment. This water system's source water susceptibility ratings, and a list of potential contaminant sources is attached

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

EPA requires monitoring for over 80 drinking water contaminants. Those contaminants listed in the table are only contaminants detected in your water. The Stanhope Borough Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2017. The state allows us to monitor for some contaminates less than once per year because the concentrations of these contaminates do not change frequently. Some of our data, through representative, are more than one year old.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

TEST DESIL TS

	1		EST RESU								
Contaminant Violat ion Y/N		Level Detected	Units of Measure ment	MCL G	MCL	Likely Source of Contamination					
Radioactive Contaminants:											
Combined Radium 228 & 226 Test results Yr. 2012	N	Range = 1.5 Highest detect = 1.5	pCi/1	0	5	Erosion of natural deposits					
Inorganic Contaminants:											
Barium Test results Yr. 2015	N	Range = 0.04 - 0.06 Highest detect = 0.08	Ppm			Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits					
Chromium Test results Yr. 2015	N	Range = 1 - 2 Highest detect = 2 Ppb 100 100				Discharge from steel and pulp mills: erosion of natural deposits					
Copper Test results Yr. 2017 Result at 90 <sup>th</sup> Percentile	N	0.33 No samples exceeded the action level	Ppm	1.3	Corrosion of household plumbing systems; erosion of natural deposits						
Fluoride Test results Yr. 2015	N	Range = 0.05 - 0.1 Highest detect = 0.1	Ppm	4	4	Erosion of Natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories					
Lead Test results Yr. 2017 Result at 90th Percentile	N	3 No sample exceeded the action level	Ppb	0	ΛL=15	Corrosion of household plumbing systems, erosion of natural deposits					
Nickel Test results Yr. 2015	N	Range = ND - 1 Highest detect = 1	Ppb	N/A	N/A	Erosion of natural deposits					
Nitrate (as Nitrogen) Test results Yr. 2017	N	Range = 0.3 - 3.3 Highest detect = 3.4	Ppm	10	10	Runoff from fertilizer use: leaching from septic tanks, sewage; erosion of natural deposits					
Volatile Organic Contaminar	ts / Disinfe	ction Byproducts:									
HAA5 Haloacetic Acids Test results Yr. 2017	N	Range = ND - 1 Highest detect = 1	Ppb	N/A	60	By-product of drinking water disinfection					
TTHM Fotal Trihalomethanes Fest results Yr, 2017	N	Range = 4 - 10 Highest detect = 10	Ppm	N/A	0	By-product of drinking water disinfection					
Secondary Contaminant		Level Detected	Units of Me	asurement		RUL					
Sodium Test results Yr. 2017		Range = 96 - 103	Ppm			50					

We exceeded the Recommended Upper Limit (RUL) for Sodium. For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in your diet. However, sodium levels above the RUL may be of concern to individuals on a sodium restricted diet.

Regulated Disinfectants	Level Detected	MRDL	MRDLG
Chlorine	Average = 0.3 Ppm	4.0 Ppm	4.0 Ppm
Test results Yr. 2017			

If you have any questions about this report or concerning your water utility, please call 973-347-6368. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Borough Council meetings at Borough Hall, 77 Main Street. Meetings are held on the last Tuesday of each month at 8:00 p.m.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- 1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 2. organic contaminants, such as salts and metals, which can be naturally occurring or result—from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- 3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 4. Organic chemical contaminates, including synthetic and volatile organic chemicals, which are byproducts of industrial process and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.
- 5. Radioactive contaminants which can de naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800 - 426 - 4791.

#### **DEFINITIONS**

In the "Test Results "table you may find some terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000. Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000. Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal -The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Secondary Contaminant – substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities. RUL's are recommendations, not mandates.

<u>Maximum Residual Disinfectant Level (MRDL):</u> The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Stanhope Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 second to 2 minutes before using water for drinking and cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water hotline or at http://www.epa.gov/safewater/lead.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Our system received a monitoring waiver for synthetic organic chemicals.

Please call our office if you have questions.

We at the Stanhope Water Department work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

### Stanhope Water Department- PWSID # NJ1919001

Stanhope Water Department is a public community water system consisting of 4 wells and 1 purchased ground water source (if needed).

This system's source water comes from the following aquifer: glacial sand and gravel, igneous and metamorphic rocks

This system purchases water from the following water system: Netcong Water Department (if needed)

#### Susceptibility Ratings for Stanhope Water Department Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

	Pathogens			Nutrients			Po	Pesticides Volatile Organic Compounds		In	organ	ics	Rad	Radionuclides F		Radon		Ву	infect produ ecurso					
Sources	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	H	М	L	Н	М	L	Н	М	L
Wells - 4		2	2	2	2				4	3		1		3	1		2	2	1	3		1	3	

Pathogens: Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

Nutrients: Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and

Volatile Organic Compounds: Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Pesticides: Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

Inorganics: Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and

nitrate.

Radionuclides: Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

Radon: Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to

http://www.nj.gov/dep/rpp/radon/index.htm or call (800) 648-0394.

Disinfection Byproduct Precursors: A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in



PHILIP D. MURPHY GOVERNOR

SHEILA Y. OLIVER

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CATHERINE R. McCABE Acting Commissioner

Mail Code 401-04Q
Division of Water Supply & Geoscience
Water System Operations Element
Bureau of Safe Drinking Water
401 E. State Street - P.O. Box 420
Trenton, New Jersey 08625-0420
Tel #: (609) 292-5550 - Fax # (609) 633-1495
http://www.nj.gov/dep/watersupply/

#### NOTICE OF NON-COMPLIANCE

EAID#: PEA180001 - 1919001

Name:

Stanhope W Dept

77 Main St

Stanhope. NJ 07874

Identifying #: PWSID No. 1919001

You are hereby NOTIFIED that a review of our records conducted on May 04, 2018 found that your facility was out of compliance with the regulations promulgated pursuant to the New Jersey Safe Drinking Water Act, N.J.S.A. 58: 12A-1 et seq. This NOTICE OF NON-COMPLIANCE has been recorded as part of the permanent enforcement history of Stanhope W Dept at the above location because your water system failed to comply with the following requirement:

Requirement: All water systems must provide a notice of the individual tap results from lead tap water monitoring carried out under the requirements of 40 CFR 141.86 to the persons served by the water system at the specific sampling site from which the sample was taken and the certification must meet the content requirements of 40 CFR 141.85(d)3; this notice must be provided no later than 30 days after learning of the tap monitoring results. in accordance with [40 CFR 141.85(d)]

<u>Violation Details:</u> LEAD CONSUMER NOTICE (LCR) for LEAD & COPPER RULE for the period 01/01/2018 to for the following sample point ID:

In response to this NOTICE OF NON-COMPLIANCE the following corrective actions must be undertaken to achieve compliance:

 If the lead consumer notice and Certification Form - Consumer Notice of Lead Tap Water Monitoring Results (BSDW 54) were completed and submitted in accordance with 40 CFR 141.85(d), for the violation listed above, they have been deemed deficient. Submit a revised and completed Certification Form, available at: <a href="http://www.nj.gov/dep/watersupply/pdf/bsdw54.pdf">http://www.nj.gov/dep/watersupply/pdf/bsdw54.pdf</a>, along with a copy of a completed lead consumer notification meeting all of the content requirements under 40 CFR 141.85(d)(3), to the Bureau of Water System Engineering within fifteen (15) calendar days of the date of this letter. Lead consumer notice templates are available at <a href="http://www.nj.gov/dep/watersupply/dws-sampreg.html">http://www.nj.gov/dep/watersupply/dws-sampreg.html</a>. For details concerning the deficiencies please contact Tina Starr or Jordana Nokes at 609-292-2957, or via email at <a href="https://www.nj.gov/dep.nj.gov">watersupply/dwp.nj.gov</a>.

- 2. If the lead consumer notice and/or Certification Form Consumer Notice of Lead Tap Water Monitoring Results (BSDW 54) were not completed and submitted in accordance with 40 CFR 141.85(d), for the violation listed above, conduct and submit a completed lead consumer notification and Certification Form, available at <a href="http://www.nj.gov/dep/watersupply/pdf/bsdw54.pdf">http://www.nj.gov/dep/watersupply/pdf/bsdw54.pdf</a>, to the Bureau of Water System Engineering as soon as practical. but no later than fifteen (15) calendar days of the date of this letter. Lead consumer notice templates are available at <a href="http://www.nj.gov/dep/watersupply/dws-sampreg.html">http://www.nj.gov/dep/watersupply/dws-sampreg.html</a>.
- 3. Community water systems must also include a notice of this violation in the Consumer Confidence Report (CCR) in accordance with 40 CFR 141.153. The CCR must include a clear and readily understandable explanation of the violation, any potential adverse health effects, and the steps the system has taken to correct the violation.

Failure to respond to this NOTICE OF NON-COMPLIANCE will result in referral for further enforcement action.

This NOTICE OF NON-COMPLIANCE does not constitute final agency action and may not be appealed or contested. The issuance of this Notice or your compliance therewith does not preclude the State of New Jersey or any of its agencies from initiating formal administrative and/or judicial enforcement action. including assessment of penalties, with respect to the items of non-compliance listed above or for any other violations. Violations of the above regulations are subject to penalties of up to \$25,000.00 per day/offense and in the event of formal administrative or enforcement action, you may appeal or contest such action or penalties.

Issued by:

Felicia Fieo, Section Chief Bureau of Safe Drinking Water

felicia feo

Signature:

Date: May 7, 2018

# **Borough of Stanhope Water Department**

Dear Resident,

Recently the Stanhope Water Department was notified by NJ Department of Environmental Protection of an administrative Non-Compliance related to providing test results to those homeowners that provided water samples to test for Lead and Copper. This administrative error has been corrected. The Stanhope Water Department results for Lead and Copper listed below continue to be <u>well below</u> the regulated action levels. A copy of the Non-Compliance Notice is provided for your review as required by NJDEP.

		T	EST RESU	JLTS						
Contaminant	Violat ion Y/N	Level Detected	Units of Measure ment	MCL G	MCL	Likely Source of Contamination				
Radioactive Contaminants:					_					
Combined Radium 228 & 226 Test results Yr. 2012	N	Range = 1.5 Highest detect = 1.5	pCi/I	0	5	Erosion of natural deposits				
Inorganic Contaminants:										
		Range = 0.04 - 0.06 Highest detect = 0.08	Ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Chromium Test results Yr. 2015	N	Range = 1 - 2 Highest detect = 2			100	Discharge from steel and pulp mills, erosion of natural deposits				
Copper Test results Yr. 2017 Result at 90 <sup>th</sup> Percentile	N	0.33 No samples exceeded the action level	Ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits				
Fluoride Test results Yr. 2015	N	Range = 0.05 - 0.1 Highest detect = 0.1	Ppm	4	4	Erosion of Natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories				
Lead Test results Yr. 2017 Result at 90 <sup>th</sup> Percentile	N	3 No sample exceeded the action level	Ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits				
Nickel Test results Yr. 2015	N	Range = ND - 1 Highest detect = 1	Ppb	N/A	N/A	Erosion of natural deposits				
Nitrate (as Nitrogen) Test results Yr. 2017	N	Range = 0.3 - 3.3 Highest detect = 3.4	Ppm	10	10	Runoff from fertilizer use; leaching from septio tanks, sewage; erosion of natural deposits				
Volatile Organic Contamina	ants / Disinfer	ction Byproducts:								
HAA5 Haloacetic Acids Test results Yr. 2017	N	Range = ND - 1 Highest detect = 1	Ppb	N/A	60	By-product of drinking water disinfection				
THM otal Trihalomethanes est results Yr. 2017	N	Range = 4 - 10 Highest detect = 10	Ppm	N/A	0	By-product of drinking water disinfection				